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Blanking system for press machine has control circuit which outputs enable signal only when optical-axis pattern and shading during actual process conform with prestored shading and optical-axis pattern

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(PIRU-)

**Novelty:** A control circuit (3) outputs an enable signal only when the optical-axis pattern and the shading beside the light receiver, which receives the light from the light projector with a processed product, e.g. aluminum sash, inserted during an actual process, conform with prestored shading and optical-axis pattern.

**Detailed Description:** The prestored shading and optical-axis pattern are produced by light transmission with a processed product inserted between the light projector and light receiver of light-ray type sensor (1). The light-ray type sensor has at least one group of light projectors and a light receiver.

**Use:** For press machine.

**Advantage:** Improves safety since a long object can be processed without doing harm to the e.g. operator's finger.

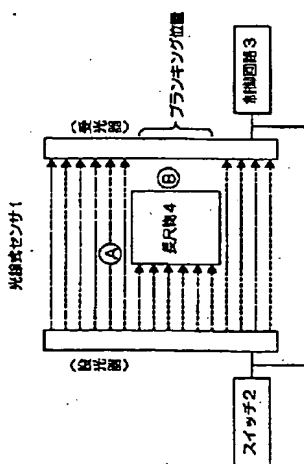
**Description of Drawing(s):** The figure shows a block diagram of the blanking system. (Drawing includes non-English language text).

Control circuit 3

(7pp Dwg.No.1/3)

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**BLANKING SYSTEM**

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EC Classification:  
Equivalents:

**Abstract**

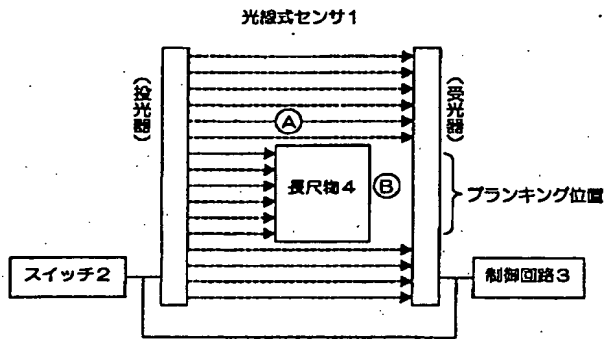
**PROBLEM TO BE SOLVED:** To prevent generation of human injuries and a product defect due to insertion of a different work and to operate a working machine at a safety side by not outputting an operation permit signal in the case of failure in hardware and a bug in software.

**SOLUTION:** A blanking system which can output an operation permit signal only when the work of a prescribed shape is inserted into the space of an optical sensor 1 where at least one set of a plurality of light emitters/light receives are arranged opposing to each other is provided with a control circuit 3 in which the optical axis pattern of light shutting off/light passing by the work inserted between the light emitter and the light receiver is stored at a light receiver side beforehand and in which an operation permit signal is outputted only when the optical axis pattern of light shutting off and light passing of the light receiver side to receive the light from the light emitter by a work inserted in actual working coincides with the optical pattern stored beforehand.

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【図1】



【図2】

